

**Amendments to the Claims:**Listing of Claims:

1. (Canceled).
2. (Canceled).
3. (Canceled).
4. (Canceled).
5. (Canceled).
6. (Canceled).
7. (Canceled).
8. (Currently amended) An apparatus for production of acrylic acid or acrolein having a catalytic gas phase oxidation reactor, comprising:
  - a) an evaporator for gasifying liquefied propylene and/or propane as raw material of acrylic acid or acrolein,
  - b) means for supplying a liquid coolant in the range of 0 to 50° C to said evaporator,
  - c) means for chilling the coolant in the range of -10 to 40° C in the evaporator by recovering latent heat of the liquefied propylene and/or propane,
  - d) means for subjecting resultant gasified propylene and/or propane to said catalytic gas phase oxidation reactor thereby preparing a gas containing acrylic acid or acrolein, and
  - e) means for circulating coolant from the evaporator to heat exchangers, which are attached to the apparatus, said heat exchangers being at least one member selected from the group consisting of an absorbing solvent cooler and a circulation cooler attached to the acrylic acid absorbing column, a condenser attached to the solvent separating column, and a condenser attached to the acrylic acid refining column; and
  - f) means for adjusting pressure of the evaporator for gasifying liquefied propylene and/or propane in the range of about 0.2 to about 2 Mpa in gauge pressure.
9. (Previously presented) An apparatus according to claim 8, wherein said means for chilling the coolant includes means for adjusting a temperature of said liquid coolant or means for adjusting a flow amount thereof.

10. (Canceled).
11. (Canceled).
12. (Canceled).
13. (Canceled).
14. (Previously presented) An apparatus for production of acrylic acid or acrolein having a catalytic gas phase oxidation reactor, comprising:
  - a) an evaporator for gasifying liquefied propylene and/or propane,
  - b) means for supplying a liquid coolant to said evaporator,
  - c) means for chilling the coolant in the evaporator by recovering latent heat of the liquefied propylene and/or propane, wherein said means for chilling the coolant includes means for adjusting a temperature of said liquid coolant or means for adjusting a flow amount thereof,
  - d) means for subjecting resultant gasified propylene and/or propane to a catalytic gas phase oxidation reaction thereby preparing a gas containing acrylic acid or acrolein, and
  - e) means for circulating coolant from the evaporator to heat exchangers, which are attached to the apparatus, said heat exchangers being at least one member selected from the group consisting of an absorbing solvent cooler and a circulation cooler attached to the acrylic acid absorbing column, a condenser attached to the solvent separating column, and a condenser attached to the acrylic acid refining column.